

LAW OFFICES
414 UNION STREET, SUITE 1600
POST OFFICE BOX 198062
NASHVILLE, TENNESSEE 37219

Jon E. Hastings (615) 252-2306 Fax: (615) 252-6306 Email: jhasting@bccb.com

Telephone (615) 244-2582
Facsimile (615) 252-2380
Internet Web http://www.bccb.com/

November 12, 1997

K. David WaddellExecutive SecretaryTennessee Regulatory Authority460 James Robertson ParkwayNashville, TN 37243-0505

Re: Un

Universal Service Generic Contested Case

Docket No. 97-00888

Dear David:

Enclosed please find an original and thirteen (13) copies of the Testimony of Thomas Hyde which we would appreciate your filing in the above-referenced docket on behalf of MCI Telecommunications Corporation and AT&T Communications of the South Central States, Inc.

Thanking you for your assistance in this matter, I am

Very truly yours,

on/E. Hastings

BOULT, CUMMINGS, CONNERS & BERRY, PLC

By:

JEH/th

Enclosures

cc: All Parties of Record (w/enc.)

BEFORE THE TENNESSEE REGULATORY AUTHORITY NASHVILLE, TENNESSEE

	4	1 G.	**,
In Re:	$\mathbf{C}^{(i)}$		
)	6	
Universal Service Generic) Doc	ket No. 97-00	888
Contested Case)	•	₹\$, †
)		
ті	STIMONY OF THOMAS HYDE	17)	_

TESTIMONY OF THOMAS HYDE

PLEASE STATE YOUR NAME, BUSINESS ADDRESS, EMPLOYMENT AND Q. ON WHOSE BEHALF YOU ARE TESTIFYING.

My name is Thomas Hyde. I am presently providing consulting services to MCI Telecommunications Corporation ("MCI"). I am testifying on behalf of MCI and AT&T Communications of the South Central States., Inc. ("AT&T").

PLEASE STATE YOUR BACKGROUND AND QUALIFICATIONS. 0.

I have over thirty years of experience in telecommunications including installation, Α. maintenance and design of switched and special toll services with AT&T; pricing, rate and tariff development with South Central Bell and BellSouth Telecommunications, Inc. ("BST") for various services including intrastate and interstate switched and special and access and technology planning with the National Exchange Carrier access; My job responsibilities required that I master diverse Association (NECA). telecommunications disciplines including network design, equipment installation and maintenance, rate and tariff development, project management and technical aspects of the public switched network. In the 1980's, while responsible for the switched and special access rate and tariff development for BST following the divestiture of the Bell System, I developed rates and support documentation for the implementation of access. As part of that process, I also had the responsibility of assuring the validity of the cost and demand inputs used in developing those rates. During this time the Federal Communications Commission (FCC) held that this was the methodology to be emulated by the other Regional Bell Operating Companies (RBOCs). For the past 5 years I have been responsible for access and technology planning at NECA, responsible for planning and implementation of Local Transport Restructure, Access Reform, ISDN, SONET and various other services. In addition, I recently testified on Unbundled Network Element costs before the Alabama, Georgia and Louisiana Commissions and on Universal Service before the Kentucky Commission.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. To address Issue 9.j. of the Issue List established in Tennessee Regulatory Authority ("TRA") Docket No. 97-00888, and to make recommendations concerning Universal Service funding and establishment of revenue benchmarks.

O. PLEASE SUMMARIZE YOUR PRINCIPAL RECOMMENDATIONS.

A. The Tennessee Regulatory Authority (TRA) should establish a State Universal Service funding mechanism that is consistent with Section 254 of the 1996

Telecommunications Act (hereafter referred to as the "Act") and the implementation decisions which have been reached by the Federal-State Joint Board on Universal

Service ("Joint Board") and the FCC. The Act and FCC/Joint Board implementation decision require that the amount of Universal Service subsidies, if any, be determined, and that the funding of these subsidies should be made explicit and external to the incumbent local exchange carriers' ("ILEC's") present revenue streams.

CALCUALTION OF A TENNESSEE - SPECIFIC UNIVERSAL SERVICE SUBSIDY

- Q. WHAT ARE THE REQUIREMENTS OF A Universal Service FUND AS SPECIFIED IN THE FEDERAL ACT?
- A. Section 254 of the Act specifies the following principles to guide policies for the preservation and advancement of Universal Service:
 - Access to advanced telecommunications and information services should be provided in all regions of the nation,
 - Consumers in all regions regardless of income, location or relative cost of
 service should have access to telecommunications and information services that
 are reasonably comparable to those services provided in urban areas at rates
 that are reasonably comparable to rates charged for similar services in urban
 areas,
 - All providers of telecommunications services should make an equitable and nondiscriminatory contribution to the preservation and advancement of Universal Service,

- There should be specific, predictable and sufficient Federal and State mechanisms to preserve and advance Universal Service,
- Schools, health care providers and libraries should have access to advanced telecommunications services,
- Other principles deemed by the Joint Board and the FCC to be necessary and appropriate for the protection of the public interest, convenience and necessity,
- Eligible telecommunications carriers shall be eligible to receive specific Federal
 Universal Service support,
- Support from the fund shall only be used to provision, maintain and upgrade facilities and services for which the support is intended.

The Act also provides specific State authority to adopt regulations that are not inconsistent with the FCC's rules to preserve and advance Universal Service. For example, Section 254(f) provides that:

- All providers of intrastate services shall contribute to the preservation and enhancement of Universal Service in a State on an equitable and nondiscriminatory basis in a manner to be determined by the State,
- A State may adopt regulations to provide for additional definitions and standards provided that the regulations adopt additional specific, predictable, and sufficient mechanisms that do not rely on or burden Federal support mechanisms.

The Joint Board noted that "Congress directed the Joint Board to recommend, and the Commission [the FCC] to adopt, a new set of Universal Service support mechanisms

that are explicit and sufficient to advance the Universal Service principles enumerated in the statute and such other principles as the Joint Board and the Commission [the FCC] believe are necessary and appropriate for the protection of the public interest, convenience and necessity, and are consistent with the 1996 Act". (Recommended Decision of the Federal-State Joint Board, CC Docket No. 96-45, released November 8, 1996).

Q. HAS THE FCC TAKEN ITS REQUIRED ACTION UNDER THE ACT?

Yes, in its CC Docket 96-45, the FCC convened a Joint Board, which issued its
Recommended Decision on November 8, 1996.
On May 7, 1997, the FCC issued its implementation Order that reflected "virtually all"

Q. DID THE FCC ADOPT ADDITIONAL PRINCIPLES UNDER THE ACT?

of the Joint Board's recommendations.

- A. Yes. The FCC agreed with the Joint Board that Universal Service subsidies should be made explicit and the funding of Universal Service should be competitively neutral.

 The FCC also agreed with the Joint Board that forward-looking economic costs, rather than embedded costs, should be used to measure the costs to provide the supported services for purposes of calculating the Universal Service subsidy.
- Q. DO YOU RECOMMEND THAT THE TRA FOLLOW THE PRINCIPLES CONTAINED IN THE ACT AND FCC IMPLEMENTATION ORDERS?

A. Yes. In addition to the fact that the Act requires that State action to adopt regulations on Universal Service must be consistent with the FCC's rules on Universal Service, from an economist's standpoint, the explicit funding of Universal Service and removal of implicit subsidies from switched access interconnection rates will provide more rational pricing and promote a competitive telecommunications industry.

Q. HOW SHOULD UNIVERSAL SERVICE BE DEFINED?

A. I recommend that features to be supported by any State Universal Service fund be defined in a manner that is consistent with the Act and the Joint Board and FCC implementation decisions. In its May 8, 1997 Order, the FCC determined that Universal Service includes: voice grade access to the public switched network, with the ability to place and receive calls; Dual Tone Multifrequency (DTMF) signaling or its functional equivalent; single-party service; access to emergency services, including in some instances, access to 911 and enhanced 911 (E911) services; access to interexchange services; access to directory assistance; and toll limitation services for qualifying low-income consumers.

The FCC contemplates that these features will be supported by a Federal Universal Service fund. This definition appears to be consistent with the FCC's definition of the features that should be supported by a State Universal Service fund.

- Q. SHOULD UNIVERSAL SERVICE FUNDING BE AVAILABLE FOR THESE FEATURES FOR BUSINESS SERVICES?
- A. The FCC concluded that both "business and residential connections that are currently supported will continue to be supported." However, historically, rates for business services have generally been priced in excess of the cost to provide the service. As a result, there should not be many business lines that will require a subsidy.
- Q. WHAT COSTS SHOULD BE CONSIDERED IN DETERMINING THE AMOUNT OF UNIVERSAL SERVICE SUBSIDY THAT IS REQUIRED?
- A. In order to determine the amount of Universal Service subsidy, the TRA must determine what the costs are to provide the supported features and then determine whether the revenues received recover those costs. The appropriate measure of costs for this purpose is the forward-looking economic cost of constructing and operating the network facilities and functions used to provide the service.

In implementing the recommendation of the Joint Board on this point, the FCC repeated the Joint Board's statement that "forward-looking economic cost best approximates the costs that would be incurred by an efficient carrier in the market" and concurred that, "as the Joint Board found, the use of forward-looking economic cost as the basis for determining support will encourage and permit economically correct levels of entry, investment, and innovation".

- Q. HOW SHOULD FORWARD-LOOKING ECONOMIC COSTS BE DETERMINED?
- A. The FCC agreed with the Joint Board's recommendation that cost models provide an efficient method of determining forward-looking economic costs. Based on the criteria recommended by the Joint Board, the FCC Order prescribed the criteria for forward-looking economic cost determinations and the cost model specifications to be used for this purpose.
- Q. DO YOU RECOMMEND THAT THE TRA USE A COST MODEL WHICH SATISFIES THESE CRITERIA TO DETERMINE THE FORWARD-LOOKING ECONOMIC COSTS OF UNIVERSAL SERVICE?
- A. Yes. State action to adopt regulations on Universal Service must be consistent with the FCC rules, and forward-looking economic costs are the appropriate measure of costs as determined by the FCC.
- Q. WHAT REVENUES SHOULD BE CONSIDERED IN DETERMINING THE AMOUNT OF UNIVERSAL SERVICE SUBSIDY THAT IS REQUIRED?
- A. The Joint Board recommended and the FCC adopted a revenue "benchmark" to be used to subtract from the forward-looking economic costs to provide the supported service features for purposes of determining the amount of the Universal Service

subsidy. This revenue benchmark includes not only the revenues received from local service but also other revenues that a carrier receives to provide vertical services, and intrastate and interstate switched access interconnection services. These are the revenues that a telecommunications carrier can reasonably be expected to use to offset its costs. Furthermore, as noted by the FCC and Joint Board, the costs to provide vertical services as well as switched access interconnection services are included in the cost of service estimated by the forward-looking economic cost models.

The FCC decided to establish a nationwide benchmark for purposes of establishing the Federal Universal Service fund. With respect to switched access interconnection services, the FCC stated that until these rates were reduced to reflect the cost of providing only the local switching and transport costs, the revenues from this service should be included in the benchmark. I recommend that the TRA adopt the revenues from services which make up the Federal revenue benchmark but use Tennessee specific data.

Q. HOW DID THE FCC ORDER TREAT TOLL REVENUES FOR PURPOSES OF THE REVENUE BENCHMARK?

A. The FCC has included switched access revenues in its benchmark. The FCC further indicated that it would seek further information to clarify the appropriate amount of intrastate toll revenue to be included in the revenue benchmark.

At the intrastate level, the services which utilize the functionality of ILEC switched

access interconnection services are interexchange carrier toll services and ILEC toll services. Hence, I would recommend that the TRA include ILEC toll revenues in the calculation of the revenue benchmark.

Q. WHAT INFORMATION DOES THE TRA NEED TO DEVELOP THE APPROPRIATE REVENUE BENCHMARK?

- A. The TRA needs the average revenue and usage per residence and business line for the following:
 - Local Service revenues, including tone dialing and non-optional EAS
 - Toll revenues
 - Inter and intrastate access revenues
 - Discretionary services revenues (e.g., caller-ID, call forwarding and optional calling plans)
 - Directory advertisement revenues
 - Subscriber Line Charges
 - Non-recurring charge revenues

Q. WHAT ARE THE APPROPRIATE RATE ELEMENTS AND RATE LEVELS FOR SWITCHED ACCESS INTERCONNECTION SERVICES ?

A. Once the Universal Service subsidy has been determined and the funding for Universal Service been made explicit and external to BST's switched access interconnection rates, these rates should be reduced to economic cost.

Today, there are several non cost-based rate elements in BST's switched access interconnection services and the rate levels for the cost-based rate elements are set well in excess of economic cost.

- Q. WHICH RATE ELEMENTS OF SWITCHED ACCESS INTERCONNECTION SERVICES ARE NON COST-BASED?
- A. In Tennessee, BST collects a Residual Interconnect Charge (RIC), a Non-Traffic Sensitive (NTS) rate element charge from purchasers of their switched access interconnection services.

The Residual Interconnect Charge arose out of the restructure of switched access interconnection rates for transport services in the early 1990's. The RIC was established as a residual rate element to recover revenues that BST had recovered through the per minute of use local transport charge. As a residual rate element, the RIC has no basis in economic costs and this rate element should be eliminated concurrent with the establishment of an external Universal Service subsidy funding mechanism.

Q. WHICH RATE ELEMENTS OF SWITCHED ACCESS INTERCONNECTION SERVICES ARE COST-BASED AND WHAT SHOULD THE RATE LEVELS BE FOR THESE RATE ELEMENTS?

A. There is not a great deal of disagreement between the purchasers of switched access interconnection services - the interexchange carriers - and the provider of those services - BST - that the only two rate elements that have a basis in economic costs are the switching (local and tandem) and transport rate elements of switched access interconnection services. Furthermore, there is not a great deal of disagreement between the parties as to the level of the economic costs to provide switching and transport.

I would recommend that the TRA establish the rate levels for the local and tandem switching rate elements for BST's switched access interconnection services at the cost-based rate levels established by the Hatfield Model Release 4.0.

- Q. AREN'T THE LOCAL SWITCHING RATES THAT YOU HAVE
 RECOMMENDED THE RATES THAT WERE PROPOSED FOR "LOCAL"
 INTERCONNECTION IN THE ARBITRATIONS?
- A. Yes. However, again there is little disagreement among the parties that the economic cost to provide local switching is the same regardless of whether the call is for "local" interconnection or "switched access" interconnection. The economic cost of a switched minute of use is the same for both. The principal difference between the two types of calls is the signaling protocol, not the use of the switch.

- Q. WHAT IS YOUR RECOMMENDATION AS TO THE RATE LEVELS FOR THE TRANSPORT RATE ELEMENT OF SWITCHED ACCESS INTERCONNECTION SERVICES ?
- A. Since BST has implemented Local Transport Restructure (LTR) and there is the potential for local transport competition to develop, I would recommend that the rate levels established by BST for the various dedicated transport options remain as set by those companies. For the common transport rate element of switched access interconnection services, I would recommend that the rates be established at the cost based rate levels produced by the Hatfield Model Release 4.0.

Like the local switching function, the economic cost to provide common transport - to transport digits- from and end office switch to a tandem switch is the same regardless of whether the call is for "local" interconnection or switched access interconnection.

- Q. WHY HAS YOUR DISCUSSION OF THE APPROPRIATE REVENUE
 BENCHMARK FOR TENNESSEE AND THE NEED FOR REDUCTIONS IN
 SWITCHED ACCESS INTERCONNECTION RATE LEVELS NOT
 ADDRESSED THE INDEPENDENT TELEPHONE COMPANIES IN
 TENNESSEE?
- A. Under the FCC Order and time schedule, a determination of the forward-looking costs to provide the features associated with the definition of Universal Service will not be

made for the rural local exchange telephone companies until the year 2001. Therefore, we have not addressed either the appropriate revenue benchmark nor the appropriate switched access interconnection rate levels for these companies.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, it does.

Respectfully submitted,

BOULT, CUMMINGS, CONNERS & BERRY PLC

y:______

Jon E. Hastings, #10470

Attorneys for MCI Telecommunications Corporation

Suite 1600, 414 Union Street

Nashville, Tennessee 37219

(615) 252-2306

Michael J. Henry MCI Telecommunications Corporation 780 Johnson Ferry Road, Suite 700 Atlanta, GA 30342 (404) 267-6375

CERTIFICATE OF SERVICE

The undersigned hereby certifies that a copy of the foregoing has been served, via U. S. Mail, postage prepaid, to the following on this the 12th day of November, 1997:

Guy M. Hicks, Esq. Attorney for BellSouth 333 Commerce Street, Suite 2101 Nashville, Tennessee 37201-3300

H. LaDon Baltimore, Esq. Attorney for LCI International Telecom Farrar & Bates, L.L.P. 211 Seventh Avenue North Suite 320 Nashville, Tennessee 37219-1823

T. G. Pappas, Esq.
Coalition of Small LEC
Bass, Berry & Sims
2700 First American Center
313 Deaderick Street
Nashville, Tennessee 37238-2700

Carolyn Tatum Roddy, Esq. Attorney for Sprint Sprint Communications Co., L.P. 3100 Cumberland Circle - N0802 Atlanta, Georgia 30339

Dana Shaffer, Esq. Attorney for NextLink 105 Molloy Street, Suite 300 Nashville, Tennessee 37201

Richard M. Tettlebaum, Esq. Citizens Telecom Suite 500 1400 16th Street, N.W. Washington, D.C. 20036 Henry Walker, Esq.
Attorney for American Communications
Services, Inc.
Boult, Cummings, Conners & Berry PLC
P.O. Box 198062
Nashville, Tennessee 37219

Charles B. Welch, Jr., Esq.
Farris, Mathews, Gilman, Branan & Hellen
511 Union Street, Suite 2400
Nashville, Tennessee 37219

L. Vincent Williams, Esq. Office of the Consumer Advocate Cordell Hull Building, 2nd Floor 426 Fifth Avenue North Nashville, Tennessee 37243-0500

James B. Wright, Esq. United Telephone-Southeast, Inc. 14111 Capital Boulevard Wake Forest, NC 27587-5900

Val Sanford, Esq.
Attorney for AT&T
Gullett, Sanford, Robinson & Martin,
PLLC
230 Fourth Avenue, North
3rd Floor
Post Office Box 198888
Nashville, Tennessee 37219-8888

Jøn/E. Hastings